

10 30 50  
TTCGGGCACGAGGGCAGGATGGCGCCACCACCAGCTAGAGTACATCTAGGTGCGTTCCTG  
M A P P P A R V H L G A F L  
70 90 110  
GCAGTGACTCCGAATCCCGGGAGCGCAGCGAGTGGGACAGAGGCAGCCGCGGCCACACCC  
A V T P N P G S A A S G T E A A A A T P  
130 150 170  
AGCAAAGTGTGGGGCTCTTCCGCGGGGAGGATTGAACCACGAGGCGGGGGCCGAGGAGCG  
S K V W G S S A G R I E P R G G G R G A  
190 210 230  
CTCCCTACCTCCATGGGACAGCACGGACCCAGTGCCCGGGCCCGGGCAGGGCGCGCCCCA  
L P T S M G Q H G P S A R A R A G R A P  
250 270 290  
GGACCCAGGCCGCGCGGGAAGCCAGCCCTCGGCTCCGGGTCCACAAGACCTTCAAGTTT  
G P R P A R E A S P R L R V H K T F K F  
310 330 350  
GTCGTCGTCGGGGTCCTGCTGCAGGTCGTACCTAGCTCAGCTGCAACCATCAAACCTTCAT  
V V V G V L L Q V V P S S A A T I K L H  
370 390 410  
GATCAATCAATTGGCACACAGCAATGGGAACATAGCCCTTTGGGAGAGTTGTGTCCACCA  
D Q S I G T Q Q W E H S P L G E L C P P  
430 450 470  
GGATCTCATAGATCAGAACGTCCTGGAGCCTGTAACCGGTGCACAGAGGGTGTGGGTAC  
G S H R S E R P G A C N R C T E G V G Y  
490 510 530  
ACCAATGCTTCCAACAATTTGTTTGCTTGCCTCCCATGTACAGCTTGTAATCAGATGAA  
T N A S N N L F A C L P C T A C K S D E  
550 570 590  
GAAGAGAGAAGTCCCTGCACCACGACCAGGAACACAGCATGTCAGTGCAAACCAGGAACT  
E E R S P C T T T R N T A C Q C K P G T  
610 630 650  
TTCCGGAATGACAATTCTGCTGAGATGTGCCGGAAGTGCAGCACAGGGTGCCCCAGAGGG  
F R N D N S A E M C R K C S T G C P R G  
670 690 710  
ATGGTCAAGGTCAAGGATTGTACGCCCTGGAGTGACATCGAGTGTGTCCACAAAGAATCA  
M V K V K D C T P W S D I E C V H K E S

FIG.1A

```

730              750              770
GGCAATGGACATAATATATGGGTGATTTTGGTTGTGACTTTGGTTGTTCCGTTGCTGTTG
G N G H N I W V I L V V T L V V P L L L
*****
790              810              830
GTGGCTGTGCTGATTGTCTGTTGTTGCATCGGCTCAGGTTGTGGAGGGGACCCCAAGTGC
V A V L I V C C C I G S G C G G D P K C
*****
850              870              890
ATGGACAGGGTGTGTTTCTGGCGCTTGGGTCTCCTACGAGGGCCTGGGGCTGAGGACAAT
M D R V C F W R L G L L R G P G A E D N
910              930              950
GCTCACAACGAGATTCTGAGCAACGCAGACTCGCTGTCCACTTTCGTCTCTGAGCAGCAA
A H N E I L S N A D S L S T F V S E Q Q
970              990              1010
ATGGAAGCCAGGAGCCGGCAGATTTGACAGGTGTCACTGTACAGTCCCCAGGGGAGGCA
M E S Q E P A E L T G V T V Q S P G E A
1030             1050             1070
CAGTGTCTGCTGGGACCGGCAGAAGCTGAAGGGTCTCAGAGGAGGAGGCTGCTGGTTCCA
Q C L L G P A E A E G S Q R R R L L V P
1090             1110             1130
GCAAATGGTGTGACCCCACTGAGACTCTGATGCTGTTCTTTGACAAGTTTGCAAACATC
A N G A D P T E T L M L F F D K F A N I
1150             1170             1190
GTGCCCTTTGACTCCTGGGACCAGCTCATGAGGCAGCTGGACCTCACGAAAAATGAGATC
V P F D S W D Q L M R Q L D L T K N E I
1210             1230             1250
GATGTGGTCAGAGCTGGTACAGCAGGCCAGGGGATGCCTTGTATGCAATGCTGATGAAA
D V V R A G T A G P G D A L Y A M L M K
1270             1290             1310
TGGGTCAACAAAACCTGGACGGAACGCCTCGATCCACACCCTGCTGGATGCCTTGGAGAGG
W V N K T G R N A S I H T L L D A L E R
1330             1350             1370
ATGGAAGAGAGACATGCAAAAGAGAAGATTCAGGACCTCTTGGTGGACTCTGGAAAGTTC
M E E R H A K E K I Q D L L V D S G K F

```

FIG.1B

|  |      |      |
|--|------|------|
| 1390   | 1410 | 1430 |
| ATCTACTTAGAAGATGGCACAGGCTCTGCCGTGTCCTTGGAGTGAAAGACTCTTTTACC  |      |      |
| I Y L E D G T G S A V S L E                                  |      |      |
| 1450   | 1470 | 1490 |
| AGAGGTTTCCTCTTAGGTGTTAGGAGTTAATACATATTAGGTTTTTTTTTTTTTAACAT  |      |      |
| 1510   | 1530 | 1550 |
| GTATACAAAGTAAATTCTTAGCCACGTGTATTGGCTCCTGCCTGTAATCCCATCACTTTG |      |      |
| 1570   | 1590 | 1610 |
| GGAGGCTGACGCCGGTGGATCCACTTGAGGTCCGAAGTTCCAAGACCAGCCCTGAACCAA |      |      |
| 1630   | 1650 | 1670 |
| CATCGTGGAATGCCCGTCTTTTACAAAAAATACAAAAATTCAACTGGAATGTGCATG    |      |      |
| 1690   | 1710 | 1730 |
| GTGTGTGCCATCATTTCTCGGCTAACTACGGGAGGTCTGAGGCCAGGAGAATCCACTTG  |      |      |
| 1750   | 1770 | 1790 |
| AACCCACGAAGGACAGTGTAGACTGCAGATTGCACCACTGCACTCCCAGCCTGGGAACA  |      |      |
| 1810   | 1830 | 1850 |
| CAGAGCAAGACTCTGTCTCAAGATAAAATAAAATAAACTTGAAAGAATTATTGCCCGACT |      |      |
| 1870   | 1890 | 1910 |
| GAGGCTCACATGCCAAAGGAAAATCTGGTTCTCCCCTGAGCTGGCCTCCGTGTGTTTCCT |      |      |
| 1930   | 1950 | 1970 |
| TATCATGGTGGTCAATTGGAGGTGTTAATTTGAATGGATTAAGGAACACCTAGAACACTG |      |      |
| 1990   | 2010 | 2030 |
| GTAAGGCATTATTTCTGGGACATTATTTCTGGGCATGTCTTCGAGGGTGTTTCCAGAGGG |      |      |
| 2050   | 2070 | 2090 |
| GATTGGCATGCGATCGGGTGGACTGAGTGGAAGAACCTACCCTTAATTTGGGGGGGCAC  |      |      |
| 2110   | 2130 | 2150 |
| CGTCCGACAGACTGGGGAGCAAGATAGAAGAAAACAAAAAAAAAAAAAAAAAAAA      |      |      |

FIG. 1C

|     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                  |   |               |             |             |                  |                  |   |               |   |                  |   |                  |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------|---|---------------|-------------|-------------|------------------|------------------|---|---------------|---|------------------|---|------------------|
| 1   | M | - | - | - | - | L | G | - | - | - | - | - | - | - | - | - | I | W | T | - | h Fas protein |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                  |   |               |             |             |                  |                  |   |               |   |                  |   |                  |
| 11  | M | G | L | S | T | V | P | D | L | L | L | P | L | V | L | E | L | L | V | I | G             | L | V | P | H | - | - | - | - | - | - | - | - | - | - | h TNFR I Protein |   |               |             |             |                  |                  |   |               |   |                  |   |                  |
| 11  | M | E | Q | R | P | R | G | C | A | A | V | A | A | L | L | L | V | L | L | G | A             | R | A | Q | G | - | - | - | - | - | - | - | - | - | - | DR3 protein      |   |               |             |             |                  |                  |   |               |   |                  |   |                  |
| 11  | M | A | P | P | P | A | R | V | H | L | G | A | F | L | A | V | T | P | N | P | G             | S | A | S | G | T | E | A | A | A | T | P | S | K | V | W                | G | S             | DR4 protein |             |                  |                  |   |               |   |                  |   |                  |
| 7   | - | - | - | - | - | - | - | - | - | - | - | - | - | L | P | L | V | L | T | - | -             | - | - | S | V | - | - | - | - | - | - | - | - | - | - | -                | - | h Fas protein |             |             |                  |                  |   |               |   |                  |   |                  |
| 34  | - | L | G | D | R | E | K | R | - | D | S | V | C | P | Q | G | K | Y | I | H | P             | Q | N | N | S | I | C | C | T | K | C | H | K | G | T | Y                | L | Y             | N           | D           | C                | h TNFR I Protein |   |               |   |                  |   |                  |
| 27  | - | - | G | T | R | S | P | R | - | C | D | C | A | - | G | D | F | - | H | K | K             | I | G | L | F | C | C | R | G | C | P | A | G | H | Y | L                | K | A             | P           | C           | DR3 protein      |                  |   |               |   |                  |   |                  |
| 41  | S | A | G | R | I | E | P | R | G | G | R | G | A | L | P | T | S | M | G | Q | H             | G | P | S | - | - | - | - | - | - | - | - | - | - | - | -                | - | -             | -           | -           | DR4 protein      |                  |   |               |   |                  |   |                  |
| 25  | A | Q | V | T | D | I | N | S | K | G | L | E | L | R | K | T | V | T | T | V | E             | T | Q | N | L | E | G | - | - | - | - | - | - | - | - | -                | - | -             | -           | -           | -                | h Fas protein    |   |               |   |                  |   |                  |
| 73  | P | G | P | G | Q | D | T | D | C | R | E | C | E | S | G | S | F | T | A | S | E             | N | H | L | R | - | H | C | L | S | C | S | K | C | R | K                | E | M             | G           | Q           | h TNFR I Protein |                  |   |               |   |                  |   |                  |
| 62  | T | E | P | C | G | N | S | T | C | L | V | C | P | Q | D | T | F | L | A | W | E             | N | H | S | E | C | A | R | C | Q | A | C | D | E | Q | A                | S | Q             | Q           | DR3 protein |                  |                  |   |               |   |                  |   |                  |
| 76  | P | R | P | A | R | E | A | S | P | R | L | R | V | H | K | T | F | K | F | V | V             | G | V | L | L | Q | V | V | P | S | S | A | A | T | I | K                | L | H             | D           | DR4 protein |                  |                  |   |               |   |                  |   |                  |
| 55  | D | G | - | - | - | - | Q | F | C | H | K | P | - | - | - | - | - | - | - | C | P             | P | G | E | R | K | A | R | D | C | T | V | N | G | D | E                | P | D             | C           | V           | P                | C                | Q | h Fas protein |   |                  |   |                  |
| 112 | V | E | I | S | S | - | - | - | - | - | - | - | - | - | - | - | - | - | - | C | T             | V | D | R | D | T | V | C | G | C | - | - | - | - | - | -                | R | K             | N           | Q           | Y                | R                | H | Y             | W | h TNFR I Protein |   |                  |
| 102 | V | A | L | E | N | - | - | - | - | - | - | - | - | - | - | - | - | - | - | C | S             | A | V | A | D | T | R | C | G | C | - | - | - | - | - | -                | K | P             | G           | W           | F                | V                | E | C             | - | DR3 protein      |   |                  |
| 116 | Q | S | I | G | T | Q | Q | W | E | H | S | P | L | G | E | L | - | - | - | C | P             | P | G | S | H | R | S | - | - | - | - | - | - | - | - | -                | - | -             | -           | -           | -                | -                | - | -             | - | DR4 protein      |   |                  |
| 87  | E | G | K | E | Y | T | D | K | A | H | F | S | S | K | R | R | C | R | L | C | D             | E | G | H | G | L | E | V | E | I | N | C | T | R | T | Q                | N | T             | K           | -           | -                | -                | - | -             | - | -                | - | h Fas protein    |
| 137 | S | E | N | L | F | Q | C | - | - | - | - | - | F | N | C | S | L | C | L | N | -             | G | T | V | H | - | - | - | - | L | S | C | Q | E | K | Q                | N | T             | V           | -           | -                | -                | - | -             | - | -                | - | h TNFR I Protein |
| 126 | - | - | Q | V | S | Q | C | V | S | S | P | F | F | Y | C | Q |   |   |   |   |               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                  |   |               |             |             |                  |                  |   |               |   |                  |   |                  |

**FIG. 2A**

|     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |         |         |         |         |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---------|---------|---------|---------|
| 127 | C | R | C | K | P | N | F | F | C | N | S | T | V | C | E | H | C | D | P | C | T | K | - | C | E | H | G | I | I | K | - | E | C | T | L | T | S | N | T | h   | Fas     | protein |         |         |
| 166 | C | T | C | H | A | G | F | F | L | R | E | - | - | - | N | E | C | V | S | C | S | N | - | C | K | S | L | E | C | T | K | L | C | L | P | Q | I | E | N | h   | TNFR I  | Protein |         |         |
| 163 | G | T | C | L | P | G | F | Y | E | H | G | - | - | - | D | G | C | V | S | C | P | T | - | S | T | L | G | - | S | C | P | E | R | C | A | A | V | C | G | W   | DR3     | protein |         |         |
| 188 | C | Q | C | K | P | G | T | F | R | N | D | N | S | A | E | M | C | R | K | C | S | T | G | C | P | R | G | M | V | K | V | K | D | C | T | P | W | S | D | I   | DR4     | protein |         |         |
| 164 | K | C | - | K | E | E | G | S | R | S | N | L | G | W | L | C | L | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -   | h       | Fas     | protein |         |
| 202 | V | K | G | T | E | D | S | G | T | T | V | L | L | P | L | V | I | F | F | G | L | C | L | S | L | S | L | F | I | G | L | M | - | - | - | - | - | - | - | h   | TNFR I  | Protein |         |         |
| 198 | R | Q | - | - | - | - | - | - | - | - | M | F | W | V | Q | V | L | L | A | G | L | V | V | P | L | L | L | L | G | A | T | L | - | - | - | - | - | - | - | -   | DR3     | protein |         |         |
| 228 | E | C | V | H | K | E | S | G | N | G | H | N | I | W | V | I | L | V | T | L | V | V | P | L | L | L | L | V | A | V | L | I | V | C | C | C | I | G | S | G   | DR4     | protein |         |         |
| 189 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | h   | Fas     | protein |         |         |
| 234 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | h   | TNFR I  | Protein |         |         |
| 222 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | DR3 | protein |         |         |         |
| 268 | C | G | G | D | P | K | C | M | D | R | V | C | F | W | R | L | G | L | R | G | P | G | A | E | E | E | D | N | A | H | N | E | I | L | S | N | A | D | S | L   | S       | DR4     | protein |         |
| 190 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -   | h       | Fas     | protein |         |
| 266 | P | L | A | P | N | P | S | F | S | P | T | P | G | F | T | P | T | L | G | F | S | P | V | P | S | S | T | F | T | S | S | S | T | Y | T | P | G | D | - | C   | -       | h       | TNFR I  | Protein |
| 254 | P | L | D | S | A | H | T | L | L | A | P | P | D | S | S | E | K | I | C | T | V | Q | L | V | G | N | S | W | T | T | P | G | Y | P | E | T | Q | E | A | L   | C       | DR3     | protein |         |
| 308 | T | F | V | S | E | Q | Q | M | E | S | Q | E | P | A | D | L | T | G | V | T | V | Q | S | P | G | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -   | -       | -       | DR4     | protein |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -   | -       | h       | Fas     | protein |
| 305 | P | N | F | A | P | R | R | E | V | A | P | P | Y | Q | G | A | D | P | I | L | A | T | A | L | A | S | D | P | I | P | N | P | L | Q | K | W | E | D | S | -   | -       | h       | TNFR I  | Protein |
| 294 | P | Q | V | T | W | S | W | D | Q | L | - | - | P | S | R | A | L | G | P | A | A | A | P | T | L | S | P | - | - | - | - | - | - | - | - | - | - | - | - | -   | -       | -       | DR3     | protein |
| 337 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -   | -       | DR4     | protein |         |

FIG.2B

|     |   |   |               |
|-----|---|---|---------------|
| 226 | - - - - -   | D V D L S K Y I T T I A G V M T L S Q V K G F V R K N G V N E A | h Fas protein |
| 345 | A H K P Q S L D T D P A T L Y A V N V P P L - R W K E F V R R L G L S D H       | h TNFR I Protein  |               |
| 322 | A G S P A M M L Q P G P Q - L Y D V M D A V P A R - R W K E F V R T L G L R E A | DR3 protein   |               |
| 363 | - - - - -   | T L M L - - F F D K F A N I V P F D S W D Q L M R Q L D L T K N | DR4 protein   |
| 258 | K I D E I K N D N V Q D T A E Q K V Q L L R N W H Q L H G K K E A - Y D T L I K | h Fas protein   |               |
| 384 | E I D R L E L Q N G R C L R E A Q Y S M L A T W R R R T P R E A T L E L L G R   | h TNFR I Protein  |               |
| 360 | E I E A V E I G R - F R D Q Q Y E M L K R W R Q Q P - - A G L G A V Y A         | DR3 protein   |               |
| 393 | E I D V V R A G T A - G P G D A L Y A M L M K W V N K T G R N A S - I H T L L D | DR4 protein   |               |
| 297 | D L K K A N L C T L A E K I Q T I I L K D I T S D S E N S N F R N E I Q S L V   | h Fas protein   |               |
| 424 | V L R D M D L L G C L E D I E E A L - - - - - C G P A A L P P A P S L L R       | h TNFR I Protein  |               |
| 396 | A L E R M G L D G C V E D L - - - - - R S R L Q R G P                           | DR3 protein   |               |
| 431 | A L E R M E E R H A K E K I Q D L L V D S G K F I Y L E D G T G S A V S L E     | DR4 protein   |               |

FIG.2C

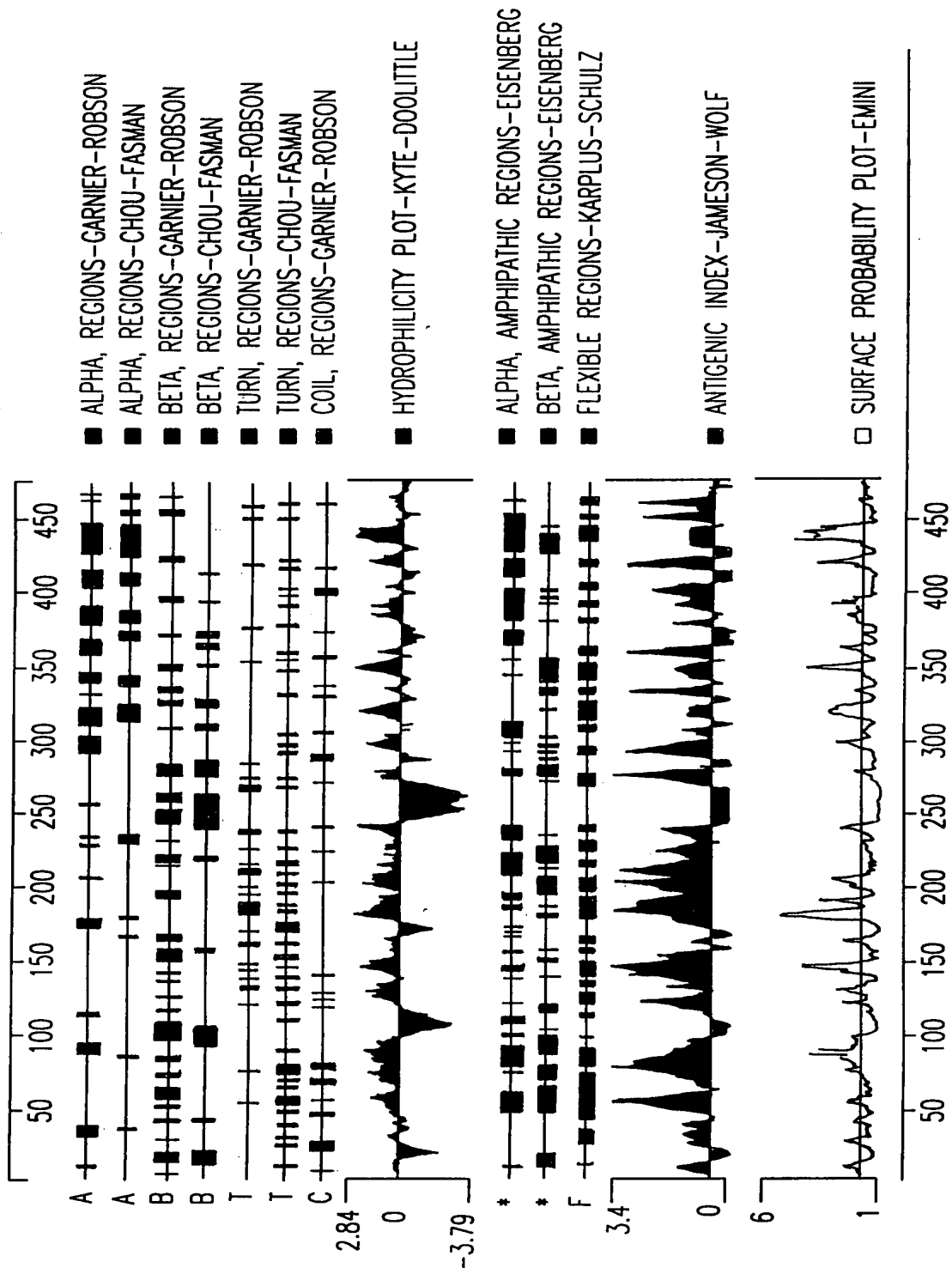


FIG.3

HTOIY07R

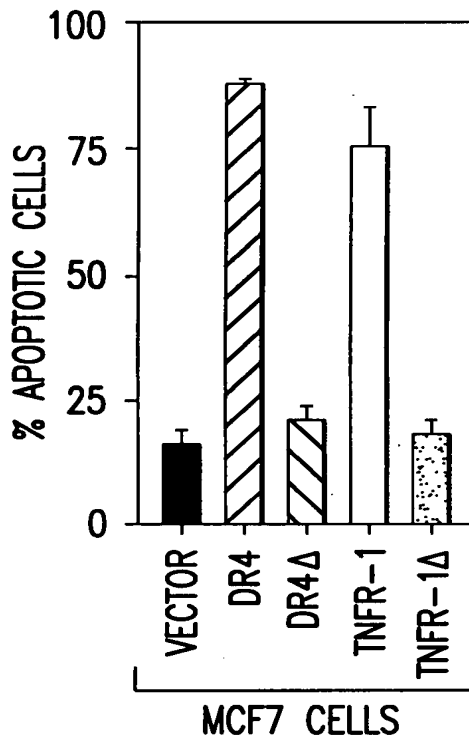
```
1  GGCANAGGTN CGTACCTAGC TCACCTGCAA CCATCAAAC T NATGATCAA
51 TCAATTGGCA CACAGCAATG GGAAACATAG CCCTTTGGAA GANTTGTNTC
101 CACCAGGATC TCATAGATCA AAACATCCTG GGAGCCTGTT AACCGGTGCC
151 CCAAAGGNTG GTCAAGGTCA AGGAATTGTT NCGCCCTGGA AGTGAACATC
201 GAGTGTNTCC ACAAAGGATT CAGGCAATGG GACATAAATA TATGGGTGAA
251 TTTTGGTTGT GAACTTTGGT TGNTCCCGTT GNTGTTGNTG GCTGTGCTGA
301 TTGTTTGTG TTGCATCGGC TTCAGGTTNT GGAGGGGGAC CCAAGTGCAT
351 GGACAGGGTG TGTTTCTGGG GTTTGGGTCT CTTAGAGGGC NTGGGTTANG
401 GCANGTTCAC AAGGGTTTTA GCAANG
```

HTXEY80R

```
1  TGGGGCTGAG GACAATGCTG ACNACGAGAT TCTGAGCAAC GCAGNACTNG
51 CTGTCCACTT TCGTCTNTGN GCAGCAAATG GAAAGCCAGG AGCCGGCAGA
101 TTGACAGGT GTCAGTGTAC AGTCCCAGG GGAGGCACAG TGTCTGCTGG
151 TGAGTTGGGG ACAGGCCCTT GCAAGACCTT GTGAGGCAGG GGGTGAAGGC
201 CATGNCTCGG CTTCNNNTGG TCAAAGGGGA AGTGGAGCCT GAGGGAGATG
251 GGA CTTNAGG GGGACGGNGC TGC GTGGGGA AAAAGCAGCC ACCNTTTGAC
301 AAGGGGGACA GGCATTTTTN CAAATGTGTG CTTNTTGGT
```

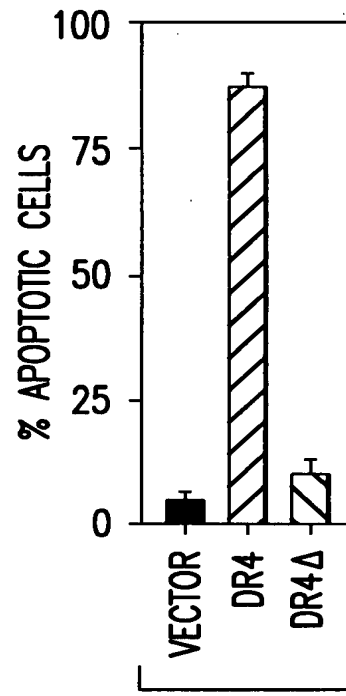
FIG.4





MCF7 CELLS

FIG.5A



293 CELLS

FIG.5B

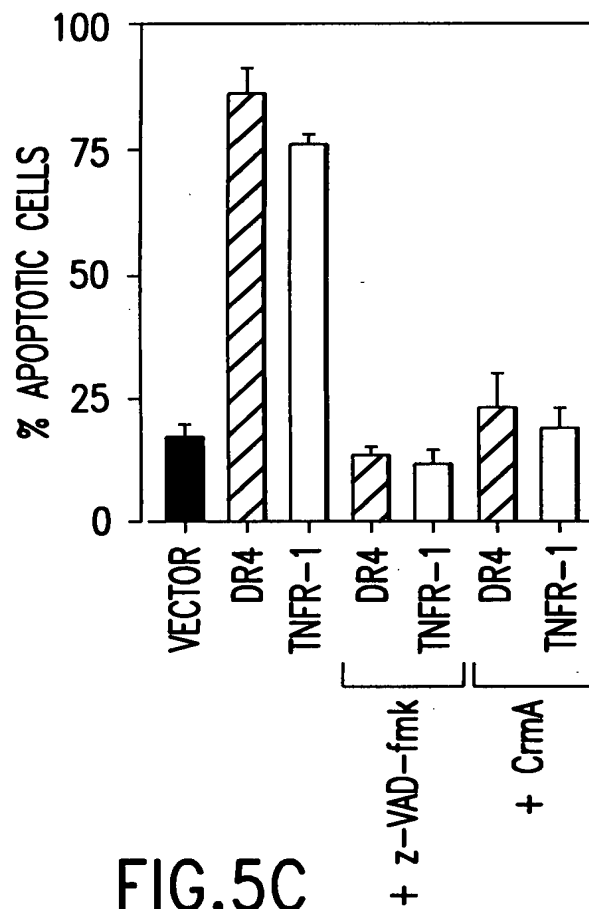


FIG.5C

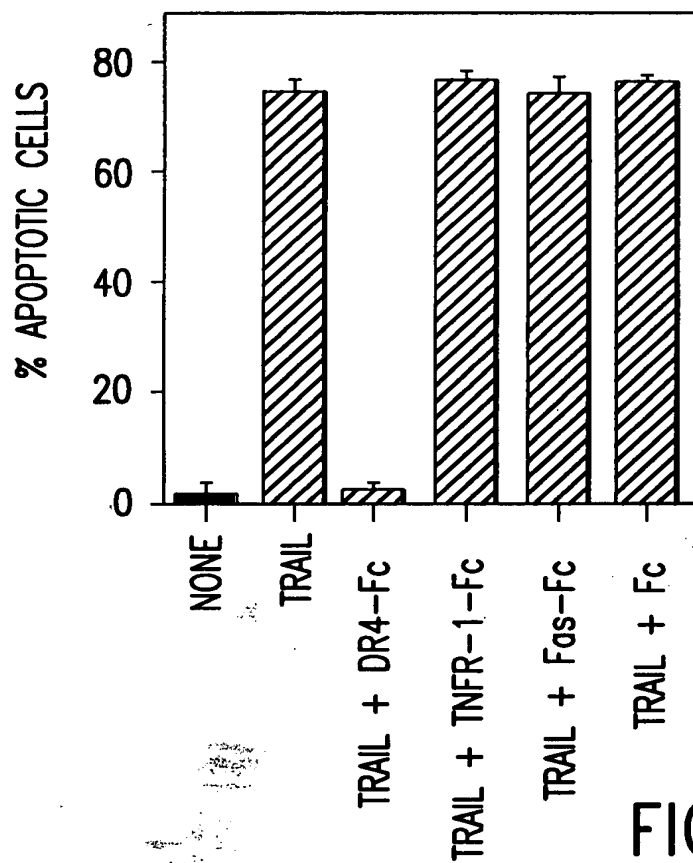


FIG. 6A

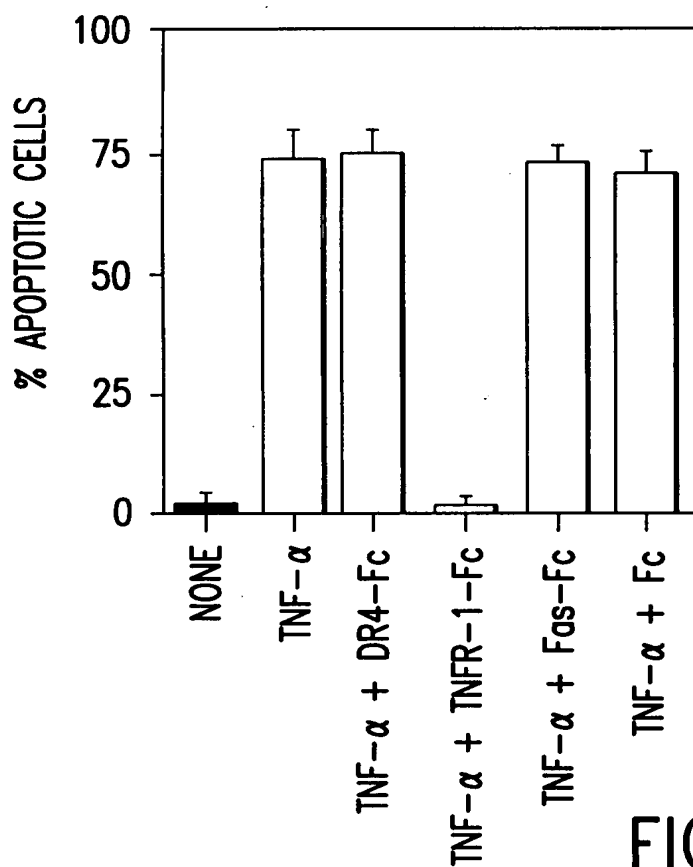


FIG. 6B